



SANDIA INSTRUMENTATION POD for the forthcoming JTF-2 Test 4.4 is loaded onto a Navy A-4C for development testing. From left are Bruce Ercole (9228), Gill Gallegos (EG&G), Cy Young (9229) and A. N. Heam (USN).

500 Flight Tests Scheduled

JTF-2 Personnel Moving Out in May For Summer of Test Activities

Within two weeks, 37 Sandians of Special Projects Organization 9200 will be departing for a summer of test operations with Joint Task Force Two. The JTF-2 Test 4.4 will involve more than 500 flights at low levels over a special test range centered around Idabel, Hugo, and Broken Bow, Okla. Six types of reconnaissance and attack aircraft will be used, including jets, light planes and helicopters.

Each of the test aircraft will carry a Sandia-designed instrumentation pod which will record the aircraft's performance. The pods are part of a data gathering system which includes special ground instrumentation stations at the target sites and instrumentation on board three C-130 aircraft which fly in orbits high above the test areas.

The purpose of the field test—the fourth since the JTF-2 project started two years ago—is to collect detailed information on how well aircrews and sensors obtain and report intelligence information while flying at low level over a simulated battlefield. No live ordnance will be carried by any of the test aircraft. The plane's performance will be measured electronically.

The target areas, located in southeast Oklahoma, will be spotted with simulated and real targets such as tanks, trucks, radar sites, storage dumps and other military equipment that would be found in a battle area.

For the past few weeks, almost daily flights from Kirtland Air Force Base have checked out the instrumentation pods on board Navy and Air Force aircraft. The

instrumentation pods will perform essentially the same functions as the pods used on previous tests, but have been redesigned with refinements in the electronics and radar antenna systems. The pods contain instrumentation which measures the altitude and position of the test aircraft and transmits signals to the C-130 instrumentation which is used with the data from the ground stations to compile a complete flight history.

The system development and compatibility flights from KAFB will continue through next week and then flight operations will shift to the test area. Further checks of the instrumentation pods with the test aircraft will be conducted in early May. A series of controlled flight observations will be conducted to judge the effectiveness of the test range and target locations before the trial and calibration flights to set a "norm" for the test. The final system checks will be conducted during June and the actual test flights will start in late July. The operation is expected to be completed in late September.

Field test manager for Sandia is J. J. Miller, supervisor of Operations Support Division 9228. Pod operations are under Bill Johnson (9228). Responsible for the pod technical systems is R. V. Peet (9223). H. M. Aus (9223) is in charge of pod maintenance.

Sandia chief of range operations is V. M. Brewster (9228).

T. A. Sellers, supervisor of Instrumentation (Continued on Page Two)

200 Students Attend

Science Youth Days at Sandia Lab

Two hundred outstanding science students from Albuquerque high schools visited the Laboratory last week to see science and engineering in action.

The two-day program (April 13-14) was Sandia's eleventh annual observance of Science Youth Days—designed to encourage young people to pursue science and engineering careers.

About 100 students and their teachers assembled in the Sandia Auditorium (Bldg. 815) each day where President Hornbeck welcomed them. After describing Sandia's responsibilities and some of the non-weapons programs, he urged the students to acquire the tools necessary for technical and scientific careers. The tools with which they can work and create, he explained, are mathematics, physics, chemistry and related disciplines. Students would, he said in conclusion, find the careers rewarding.

Richard S. Claassen, director of Physical Research 5100, then addressed the students. After describing the individual backgrounds and current work assignments of a few of the Sandia engineers and scientists the students would see during their tour, he stated that integrity was the single most important characteristic common to all of the Sandians he described.

"Scientific and technical truths must stand. They cannot be bent," Mr. Claassen said. He then cited other common characteristics such as curiosity and an interest

in their jobs. Finally, he added, they all enjoy learning.

Attending were students from seven public high schools and five parochial and private schools in Albuquerque.

The remainder of the program involved tours through several laboratories in Technical Area I.



SCIENCE STUDENTS viewed microminiaturized components during the recent program at the Laboratory.

SANDIA LAB NEWS

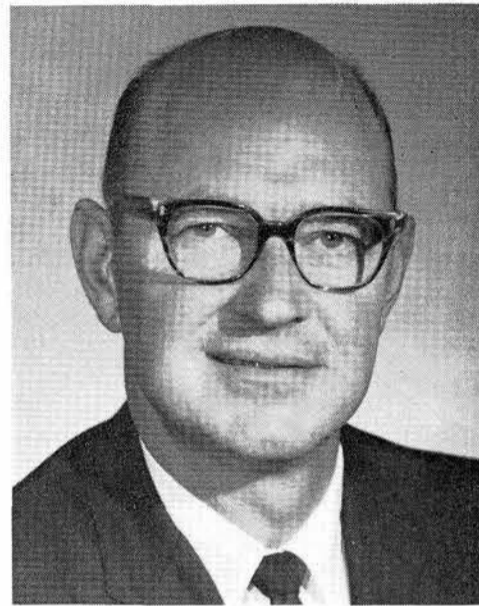


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SANDIA LABORATORIES

ALBUQUERQUE, NEW MEXICO
LIVERMORE, CALIFORNIA

OPERATED BY SANDIA CORPORATION FOR
THE U. S. ATOMIC ENERGY COMMISSION



Charles R. Barncord Promoted to Director Of 2200 Organization

Charles R. Barncord has been appointed director of Design Information Center 2200, effective May 1.

Mr. Barncord, who is currently manager of Test Department 8120 at Livermore Laboratory, will succeed T. T. Robertson. Mr. Robertson will be on special assignment reporting to R. W. Henderson, vice president 2000, for a month before his retirement May 31.

Mr. Barncord was an engineer with a Los Alamos Scientific Laboratory group at Sandia Laboratory when the Corporation was formed in 1949. In the summer of 1950 he transferred from engineering liaison in the machine shop to a project engineering group. One year later he was promoted to division supervisor of a transition engineering group. In September 1955 he was transferred to Livermore where he was the first supervisor of the initial group of Sandians. In January 1957 he was promoted to manager of an engineering development department. In May 1966 he transferred to the position he now leaves.

Mr. Barncord entered the U. S. Army in 1942. During his military service he attended Ohio State University and was assigned to Los Alamos Scientific Laboratory in March 1944.

He received his BS degree in mechanical engineering from the University of New Mexico in June 1949 and attended Kansas State Teacher's College. He is a member of Pi Tau Sigma and Sigma Tau.



C. R. Pritchett to Succeed K. S. Spoon as Director, Purchasing and Traffic 4300

Clarence R. Pritchett is promoted to director, Purchasing and Traffic 4300, effective May 1 in anticipation of Kenneth S. Spoon's retirement on June 30.

Mr. Pritchett has been manager of Organizational Planning Department 4380 since he came to the Laboratory in August 1961.

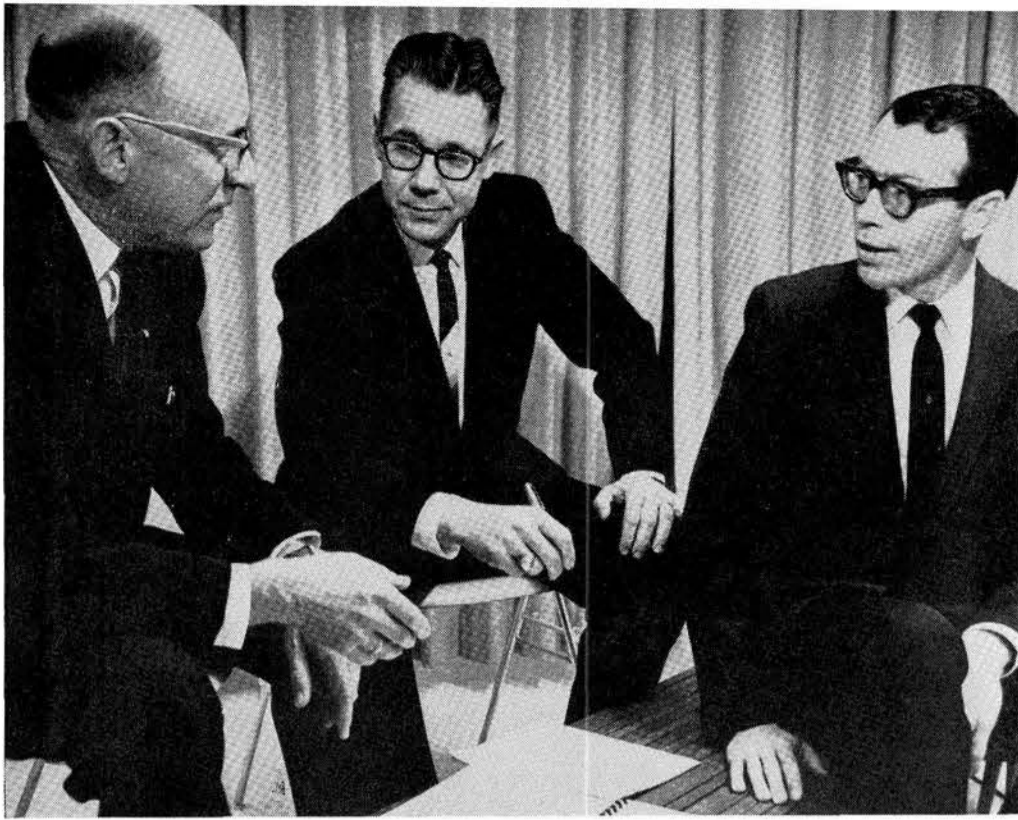
Mr. Pritchett started his Western Electric career in March 1936 when he joined the Point Breeze works in Baltimore as a machine operator. Following various production and inspection assignments, he transferred to purchasing as an expeditor in May 1941.

From September 1946 to June 1947, Mr. Pritchett was granted a leave of absence to serve with the U. S. Army infantry, mainly in Korea. Following his military service, he returned to Point Breeze works as an assistant buyer and was transferred to a new solid state electronics plant in Reading, Pa., in July 1952 as buyer in charge. Three years later he was named senior buyer of the Defense Projects Division in New York City and in January 1957 he was promoted to assistant purchasing agent. In November 1959 he transferred to government sales as department manager of the Defense Projects Division. He was named resident purchasing agent of the Oklahoma City works in January 1961.

Mr. Pritchett is a member of the National Association of Purchasing Agents and the New Mexico Business and Manufacturing Association.



USE OF WATER TABLE as a visualization aid in fluidics is explained to Science Youth Day visitors by J. D. Cyrus (1325). About 200 outstanding science students toured some of Sandia's facilities during the special event.



IEEE CONFERENCE FORMAT is discussed by (l to r) O. M. Stuetzer (1420), T. L. Pace (7210) and K. D. Hardin (1434) during a recent meeting.

800 Engineers Expected to Attend IEEE Region Six Conference Here

Frontiers of Energy Conversion is the theme of the Sixth Regional Conference of the Institute of Electrical and Electronics Engineers to be held in Albuquerque May 9-11.

About 800 engineers from the 11 states in the IEEE's Region Six are expected to attend the three-day program, according to T. L. Pace (7210), general chairman of the conference. Technical sessions will include papers ranging from electric automobiles to giant power distribution systems.

Conference headquarters will be at the Sheraton Western Skies Motor Hotel. The keynote session at 10:30 a.m. May 9 at Holiday Inn will feature Frank J. Thomas, assistant director of Defense Research and Engineering, Department of Defense, who will speak on "Nuclear Projects."

Following the opening session, Gov. keynote session at 10:30 a.m., May 9 at a luncheon.

Some 20 invited papers will be presented during five technical sessions to be held at Holiday Inn. Bus service will be provided to shuttle attendees between the two motels.

Three tours of local facilities, each from two to three hours, and an all-day tour of Los Alamos Scientific Laboratory will be conducted as part of the conference. On the afternoon of May 9, the group will tour the Public Service Company's System Operation Control Center. The following day there will be a technical tour of LASL, which will include the Omega Reactor, Untrex Reactor, Project Sherwood facility, Cryogenic Group and the LASL Museum.

On the morning of May 11, the tour of Kirtland AFB will include a computer facility, Ruby Laser Laboratory, Arming and Fusing Laboratory, Flash X-Ray facility and a high energy density experimental installation. That afternoon the group will visit Sandia's Sphere of Science and see some of the facilities in Technical Area III.

Registration fees for the technical sessions are \$3 for IEEE members and \$5 for non-members. Pre-registration deadline is April 28. Early registrants will receive a free \$3-ticket for the social hour. All meals and other activities will be extra.

Sandians serving with Mr. Pace on the conference committee and their responsibilities are K. D. Hardin (1434), vice chairman; O. M. Stuetzer (1420), technical program committee and J. L. Wentz (1133) on the publicity committee. R. G. Scharrer (7252) is chairman of the Albuquerque Section of IEEE.

Continued from Page One

Test Starts for JTF-2 Group

tation Operations Division 9222, has led the development of instrumentation systems and will be manager of the Sandia Fort Smith (Ark.) operations activities.

Test scientists, who will look at the early data to decide if it is valid and meets test requirements, are A. F. Beck and R. P. Syler (both 9215). W. H. Robertson (9213) is test statistician. W. H. Everhart (9228) will be test coordinator responsible for flight operations at Fort Smith.

Sandians who will operate instrumentation on board the C-130 aircraft are R. A. Case, A. L. Johnson and R. L. Peabody (all 9228).

J. A. Laster (9223) will supervise maintenance of the C-130 instrumentation systems. J. T. Lannon (9223) will be in charge of the Fort Smith data center. J. M. McIntire (9223) will be responsible for the voice recording system in the pods. D. W. Savage (9223) will handle Distance Measurement Equipment (DME) maintenance and calibration. J. E. Palmer (9228) will be communications engineer for the test.

Data from the 500 test flights will be processed by Data Operations Division 9229 under D. H. Denton.

Administrative support for the operation will be provided by F. C. Rivera, D. R. Salazar and W. A. Rhinehart (all 2551).

B. H. Finley (2152) will head a team of Sandia personnel interviewers who will "debrief" pilots after the flights. Pilot performance and the human factors involved in the tests are important considerations in evaluating test data.

In addition to the 37 Sandia personnel involved in the test, about 56 EG&G personnel will participate. Don Marsinkavage is the EG&G project engineer and Ken Jennings is the EG&G operations coordinator.

Roy E. Brett Saves Man's Life

Mouth-to-mouth resuscitation administered by Roy E. Brett, a Sandia security inspector in Patrol Division 3242, saved a man's life at an Elks Club meeting recently.

It was a dinner honoring various committee chairmen. Across the room, Roy noticed a stir of activity—the recognizable stir that indicates trouble.

Soon, someone asked for a doctor over the public address system and shortly thereafter came the call for anyone who knew how to give mouth-to-mouth resuscitation.

Roy made his way through the crowd and said he could do it.

The man did not respond right away. Roy could see that his efforts were not getting any air into the man's lungs. It was only a few moments, but it seemed like an eternity as Roy searched for the difficulty. The man had "turned blue."

Roy found a piece of food lodged deep in the man's throat. Roy was finally able to remove it and continue the treatment. Within a few moments, the man was responding.

A doctor arrived followed by the fire rescue unit with oxygen equipment. The victim recovered. Roy's efforts are credited with saving the man's life.

Roy credits his training as a Sandia security inspector. All Division 3242 inspectors have completed training in the standard 16-hour Red Cross first aid course in



addition to special instruction in mouth-to-mouth resuscitation. Every two years, the inspectors complete a six-hour refresher course.

Roy feels that this training made the difference.

He is particularly grateful for the training since the victim was a good friend, a man he had known and worked with in Elks Club activities for more than 15 years.

Special Events Planned for National Secretaries Week, April 23-29

Approximately 400 secretaries at Sandia will be among those honored during National Secretaries Week April 23-29 and on Secretaries Day, April 26.

For the past 14 years, National Secretaries Association (International) has cooperated with industry and management in paying tribute to the secretarial profession. During "their week," secretaries are given special recognition for the role they play in business, industry, education, government and the professions. This week also serves to remind secretaries of their responsibilities to their employers and to their profession.

The Albuquerque chapter of NSA will observe the occasion by sponsoring a Secretary of the Year luncheon tomorrow at Hoyt's Dinner Bell. Josephine Hanna (4000) won this honor last year. O. M. Stuetzer (1420) will be crowned as the chapter's choice for "Boss of the Year." He was chosen for this honor because of his qualifications as a person, boss and citizen. A scholarship winner will also be announced.

Other activities for the week include window displays downtown and at Winrock and Coronado shopping centers.

Sandia secretaries currently holding office in the 52-member local NSA chapter are Josephine Hanna, chairman for Secretary of the Year and the 1967 Regional meeting; Winifred Sandusky (6000), Certified Professional Secretary committee chairman; Edith Blum (4200), employment committee chairman; Helen Walsh (5140), membership chairman.

NSA has a membership of over 25,000 in 565 chapters throughout the world. To be eligible to join, a woman must have at least two years of secretarial experience, and must be employed as a secretary. The association's purpose is to evaluate the standards of the secretarial profession through educational programs.

One of NSA's activities is sponsoring the Certified Professional Secretary program. To become a CPS, a secretary must successfully complete a six-part examination of personal adjustment and human relations, business law, business administration, secretarial accounting, secretarial procedures and secretarial skills.

At present, 3590 secretaries (including seven men) from throughout the United States, Puerto Rico and Canada have passed the examination. Twenty-eight from New Mexico have been certified, including five now at Sandia Laboratory: Josephine Hanna, Winifred Sandusky, Betty Pickel (4300), Jean Langston (5100) and Helen Walsh.

The examination is given annually the first Friday and Saturday in May at various colleges (the University of New Mexico is the test center here). Applications may be obtained from Winifred. A CPS study group has been organized at Sandia under the sponsorship of M. A. McCutchan (3132) with Jean and Helen serving as counselors.



NATIONAL SECRETARIES WEEK, April 23-29, is of special importance to these Sandia women who head various committees in the local chapter of National Secretaries Association (International). From lower left clockwise are Edith Blum (4200), Winifred Sandusky (6000), Josephine Hanna (4000), Mavis Bowland (2552) and Helen Walsh (5140).

SANDIA LAB NEWS



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Supervisory Appointment



ARLYN N. BLACKWELL to manager of Engineering Evaluation Department 8110, effective April 16.

After joining Sandia at Livermore in September 1959, Arlyn worked in the structural analysis organization, concentrating on heat transfer and aerodynamics studies, and in October 1960 he was promoted to supervisor of Thermodynamics and Dynamics Section. In January 1965, Arlyn was promoted to supervisor of Applied Mechanics I Division. For the past 15 months he has been supervisor of Analytical Division 8149.

He received his BS degree in mechanical engineering from the University of California at Berkeley in 1958, and his MS degree in mechanical engineering from the same university in 1960.

From 1953-55 Arlyn served in the Army Corps of Engineers and was stationed in San Francisco and Alaska.

He is a registered professional engineer in California, a member of ASME and engineering honorary societies Tau Beta Pi and Pi Tau Sigma and past chairman of the Mount Diablo Subsection of ASME.

Dedication Week Set For Chabot College

Chabot College's new campus, located at 25555 Hesperian Boulevard, Hayward, will be dedicated in week-long ceremonies May 1-7. The dedication commemorates the establishment of the College and opens it officially to the service of Southern Alameda County.

The public is cordially invited to visit the campus during the week and to attend the various activities which include campus tours, planetarium programs, concerts, symposiums, lectures, a film festival, drama productions, an art exhibit, luncheons for area organizations, the Golden Gate Conference track meet, a dedication luncheon and the formal dedication ceremonies.

On Saturday, May 6, there will be an open house and tours of the campus for high school juniors and seniors and their parents.



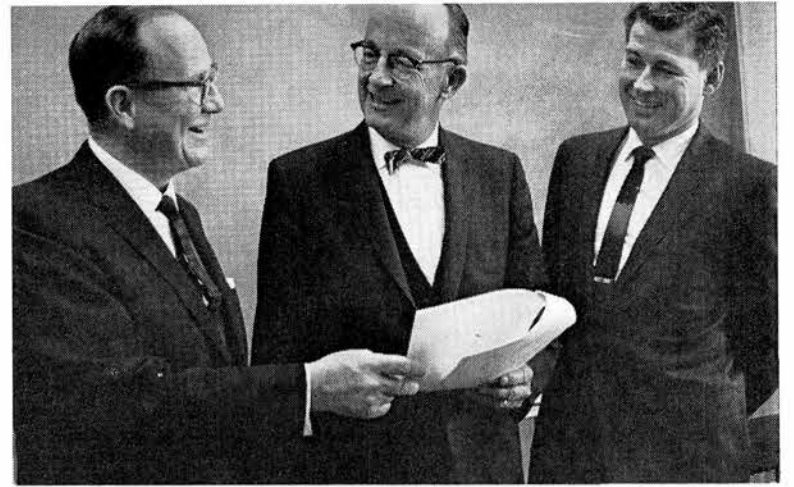
Tolly A. Vincent (8235)

Take A Memo, Please

At home or work, good housekeeping habits can prevent accidents.



NEW CONTRACTS—(left photo) Sheet Metal Workers International Association, Local No. 216, AFL-CIO, and SCLL signed a new 20-month contract, effective April 5, 1967. Shown at the signing are (l to r) D. D. Wagner, supervisor, Compensation and Labor Relations Division 8211; E. L. Arellano, business manager SMWIA; N. B. Curry of Compensation and Labor Relations Division 8211; C. H.



DeSelm, director of Staff Services at Livermore 8200; and O. E. Parrish (8223-2), union steward. (In right photo) Building and Construction Trades Council of Alameda County, AFL-CIO, and SCLL signed a new 20-month contract, effective March 1, 1967. Shown are (l to r) Mr. DeSelm; L. Childers, business representative of the Building Trades Council; and Mr. Wagner.

New Pre-Retirement Series Offered for SCLL Employees

Livermore Laboratory is offering another series of discussion meetings as part of its continuing pre-retirement counseling program.

The series, developed to help employees and their spouses prepare for retirement while still working, is being conducted this spring primarily for those who plan to retire within the next 15 years. However, others interested in any of the subjects are invited to attend.

Arranged by Employee Benefits Division 8214, the meetings will be held in five two-hour evening sessions at the LRL (East Ave.) cafeteria. Sessions, consisting of lectures and question-and-answer periods, are scheduled on consecutive Tuesdays, beginning April 25, at 7:30 p.m.

At the first meeting, M. A. Pound and W. J. Henderson of Division 8214 will discuss Sandia benefits, including the retirement plan, health care coverage, life insurance and retirement annuity.

Other meetings will feature various topics presented by guest speakers from the Bay Area: May 2, Eugene F. Williams, manager of the Hayward Office, Social Security Administration, "Social Security Benefits, Medicare"; May 9, M. Sundell, Employment Service Supervisor, and Thelma Dickinson, Unemployment Insurance Supervisor, Department of Employment, Hayward, "Unemployment Insurance, Labor Market and Employment Placement Service"; May 16, C. L. Winkel, Trust Officer, Crocker-Citizens National Bank, Oakland, "Financial Planning, Relationship of Trusts and Wills"; and May 23, Mrs. Gladys Worthington, Social Planning Consultant, Council of Social Planning, Alameda County, "Social Adjustments."

For additional information, contact W. J. Henderson, ext. 2254.

Livermore Notes

Liz Bodie of Library Division 8232 was one of three panel speakers at a meeting of the Special Libraries Association, San Francisco Bay Region Chapter, held in Oakland, March 29. Her speech, "Descriptive Cataloging Methods for Computer Indexes," was illustrated with slides prepared by Joe McManus of Graphic Arts and Presentation Services Division 8233.

Jerry Maloney (8112) has been elected president of the Livermore Student Educational Loan Fund (SELF). SELF is a nonprofit corporation established to provide money on a noninterest basis for deserving high school graduates from the Livermore area who need financial aid to continue their education. The fund eventually will become revolving and self-sustaining as loans are repaid.

Dick Cook (8163), the organization's new vice president, is heading this year's drive to replenish the base of the fund. Plans for the drive include the SELF "Golf-O-Rama," to be played April 30 at the new Las Positas Golf Course in Livermore, starting at 10 a.m. According to Joe Genoni (8235), who is in charge of the golf tourney, the \$10 entry fee will provide prize money and a contribution fund. Also planned is the annual house-to-house membership canvass to be conducted by high school students before the end of the school year.

The Bay Area's professional soccer team, the California Clippers, made its debut at the Oakland Coliseum this week. They will be playing 16 games in the Coliseum during their initial season which extends through August.

Because the sport is new to most American fans, the Clippers are offering low-priced seats and discount tickets are available through Employee Benefits 8214.

A schedule of the games is posted on SCLL bulletin boards.

LIVERMORE NEWS

'New' Antique Lamps Are Source Of Light and Pride For Sandian

Fifteen lamps, 50 to 100 years old, make up a "new" antique collection for Pat Hinrichsen (8232), and her husband Virgil (LRL).

And what's a "new" antique?

"It's an expression antique enthusiasts now use to describe quality items made from 1890 to 1925," says Pat. "Usually these items are not old enough to be classified as antiques (100 years or more), nonetheless buyers are creating quite a market for them."

Although the Hinrichsen collection fits the definition of "new" antiques, the lamps were not purchased with the thought of resale.

Several years ago in Cripple Creek, Colo., friends of Pat and Virgil were throwing away household items from the 1890 gold mining era.

"I just couldn't let things that I appreciated so much be destroyed," said Pat, "so I started to collect the articles I could use."

That's why, among hundreds of other collector's items, she has 15 useful lamps all of which have been modified by Virgil.

The oldest of the lamps is a red glass sanctuary lamp with a thumb-print design on the globe. Pat's aunt rescued it from a Salida, Colo., church that was demolished in the early 1900's. The lamp has been wired so that its electric bulb lights the entryway of their home with a soft candle glow.

A 75-year-old English heater-lamp has also been converted. The kerosene-soaked wick flame which previously lighted the inside of the large cranberry glass base has been replaced by miniature indicator lamps joined by low voltage resistors. The top of the lamp has been extended in height, a bulb added, and the bulb surrounded by a shade that complements the size and shape of the base.

Some of the lamps in the collection offer

more than a touch of beauty in the Hinrichsen home. They also bring other past events to mind.

Like the lamp made from a white china washbowl and pitcher.

Many yesterdays ago in a Salida, Colo., hotel, the last of the Western desperados, Billy the Kid, supposedly washed in the bowl. (Pat prefers to believe, rather than dispute, the historical validity of that event.)

Today, a philodendron thrives in the bowl under the warmth of the lamp's light.

Then there's the lamp made from a tall, ornate, brass fern stand.

Acquired in Colorado, arrangements had to be made to get the stand to San Francisco.

To Pat, the solution was simple.

Carry it on the plane.

Finding a place in the crowded passenger compartment for a heavy, three-foot-tall fern stand was not accomplished without incurring looks of disbelief from airline personnel, other passengers, and Pat's husband. For a time thereafter, there was little conversation about lamp collections.

Now, however, memories of that trip seem to endear the lamp more to Pat and Virgil.

A 60-year-old lamp made from a Russian samovar (i.e. metal boiler) can produce hot water if glowing charcoal is placed in the vertical iron tube which runs through the center of the water-filled brass kettle base. "Virgil is not convinced that the tea made from the water in that kettle would be the tastiest, so we don't fire it up," says Pat.

When asked what advice she could give to people who want to start collecting "new" antiques, Pat replied, "Read up on the items that interest you and look closely at their features before you buy. Excellent reproductions are being made of older articles, and you could easily pay much more for the item than it's worth."



"NEW" ANTIQUE LAMP COLLECTION surrounds Pat Hinrichsen (8232). These 50 to 100-year-old lamps normally located throughout the Hinrichsen home were moved temporarily to display them more effectively.



WILLARD SCRANTON (2222) addresses members of the Free Lance Orators during a noon hour session on the mezzanine of Bldg. 841. The informal group invites anyone interested in public speaking skills to join the fun each Wednesday noon.

Meeting Wednesday Noons

Free Lance Orators Offer Fun Plus Improvement of Speaking Techniques

Speaking to a group is an emotional experience. Stage fright (or whatever words describe the queasy stomach, sweaty hands, perspiring brow and weak knees experienced by a speaker as he approaches a lectern) plagues all new speakers.

The Free Lance Orators is an informal group at Sandia dedicated to eliminating stage fright for speakers. The group meets each Wednesday during the noon hour from 12:10 to 12:50. Meetings are held on the mezzanine in Bldg. 841, a large area with space to accommodate all comers.

The program consists of a volunteer speaker who has prepared a short talk. A master of ceremonies delivers a few pointers on public speaking and invites any and all to say a few words.

The only cure for stage fright is exper-

ience in speaking. With experience comes confidence and reduction in the stage fright symptoms. Speaking becomes a pleasurable experience.

W. A. Scranton (2222) is the next thing to a leader of the group. It's an informal organization. He invites anyone interested to attend the sessions. Bldg. 841 is centrally located in Tech Area I, and the stairway to the mezzanine is on the west side of the building. Bring your brown bag or lunch box and join the fun. Spectators are welcome, and the talks are entertaining.

On Wednesday, April 26, Fred Villa (2546) is the scheduled speaker. He will discuss, "Integrity." Larry Williams (4213) will be master of ceremonies.

On May 3, Howard Turner (9222) will be the featured speaker discussing "A Brighter Tomorrow." Mr. Villa will be master of ceremonies.

Schedule of speakers for the Free Lance Orators is posted on unofficial bulletin boards. One of these days, how about having your name there?

Strome to Discuss 'Image'

R. K. Strome, supervisor of Technical Illustration Section 3463-1, will participate in the program of the 1967 International Technical Communications Conference in Chicago May 25-27.

He will moderate a panel discussion on "The Corporate Visual Image" and will be a panel member for a discussion of various technical society activities. Representatives of the Technical Illustration Management Association, National Association of Industrial Artists, Society of Engineering Illustrators and Society of Technical Writers and Publishers will be members of the panel.



COST SAVINGS in the form of a little red wagon makes life easier for Joan Flinchum (5231). She uses it to take computer cards and readout material from Division 5231 offices to the satellite computer in Bldg. 806. Dirk Dahlgren, who requisitioned the wagon, said it cost about \$12 where a basket cart would have cost about \$50. And the red wagon is more fun.

Albuquerque Chapter of JOPA for Single Adults Organized; Dance May 5

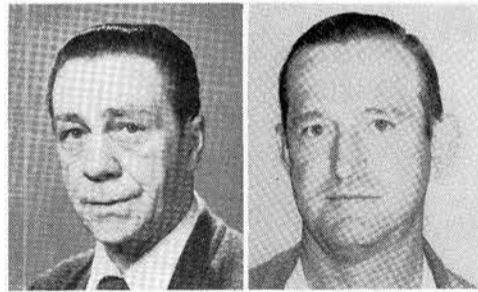
An organization of young single people, formed three years ago in Washington, D. C., and now in operation in 15 major cities throughout the country, will soon have an Albuquerque chapter. Gloria Sais (4332), receptionist in Bldg. 800, Sandia's first charter member of the organization, called JOPA, reports that the first local activity will be a dance at Western Skies hotel May 5.

JOPA (Junior Officers and Professional Association) is open to single men and women between the ages of 21 and 35. The men must be military officers or professional employees (college graduates).

The principal objective of the organization is entertainment and social activity. It is not a "lonely hearts" club or matrimonial agency. There is no club building or regular meeting place. Through local committees the group plans dances and other social activities and members obtain information about upcoming events by calling an answering service number.

The party on May 5 at Western Skies will start at 8:30 p.m. and is informal. Admission is \$3 per person. Free charter memberships will be offered to interested people who attend.

Deaths



J. S. Cundy C. E. Alderman

John S. Cundy, supervisor of Mockup and Building Service Section 4614-3, died April 9 after a long illness. He was 58.

He had been at Sandia Laboratory since February 1948.

He is survived by his widow.

Charles E. Alderman, a painter in Support Maintenance Section 4518-1, died April 16 in a local hospital. He was injured in a fall from a roof at Sandia Laboratory April 10. He was 48.

He is survived by his widow, a son and a sister.

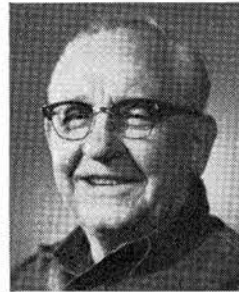
His death was the first on-the-job fatality at Sandia Laboratory in more than 20 years of operation.

Sympathy

To J. M. Hoffman (5233) for the death of his daughter, Jennifer Sue, April 13.

To Connie (4613) and Leo Baca (3242) for the death of Connie's sister in San Diego, Calif., April 17. Because of her sister's condition, the kidney transplant operation, in which Connie had offered to be the donor, was not performed.

Retiring



Eugene O. (Rudy) Rudat retires the end of this month after almost 20 years at Sandia. He came to work in November 1947 and since then has been a machinist in the Development Shops organization, currently with Branch Shop Section 4252-6 of the Machine Shop Division.

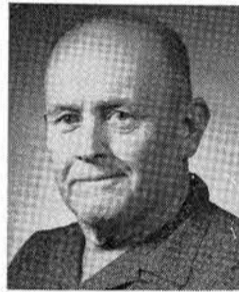
Before his employment with Sandia, Rudy had been with the Granite City (Ill.) Steel Company for 20 years.

Mr. and Mrs. Rudat live at 311 Truman NE. Their daughter and son-in-law (L. M. Jercinovic, 3210) live in Albuquerque. The Rudats have six grandchildren and two great-grandchildren.

"I will make my plans as I go," Rudy says. "If we get up one morning and decide to take a trip, we'll do it. I might want to work in my yard, or maybe I'll want to sit in a rocking chair all day. I like to cook and I may just put on my cap and do some baking."

Rudy says his wife is also going to retire—"No more watching the clock and keeping me on schedule, she is going to enjoy this retirement as much as I am."

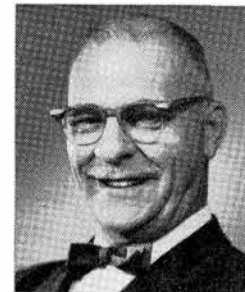
* * *



Albert P. Askren will retire from Sandia Laboratory May 4. He joined the Company in April 1951 as a carpenter and has been assigned to Shops Section 4514-2 of Maintenance Service Division.

Before coming to Sandia, Al worked in the construction field in Albuquerque. Mr. and Mrs. Askren live at 444 Texas NE. They have a son, daughter-in-law and one grandchild living in Albuquerque.

Al's retirement plans include vacationing in Seattle, Wash., for a visit with his brother, and enjoying his camper on lots of fishing trips.



George F. Miller, a senior draftsman in Design Definition Section B III 2212-3, is retiring the end of this month. He joined Sandia's drafting organization in October 1954.

George had worked in Texas before coming to Sandia—one year as a cost engineer for Monsanto Chemical Company, and four years for Brown & Root Construction Engineers in Houston. Before that he had been a product designer for A. C. Gilbert Co., in his home state of Connecticut.

Mr. and Mrs. Miller have two children, a daughter in Albuquerque, and a son in Houston. George became a grandfather for the first and second time in January and March of this year—two granddaughters, one in Albuquerque, and one in Houston. His immediate retirement plans include a trip to Houston to get acquainted with the new baby.

From Houston, Mr. and Mrs. Miller will visit relatives in Sarasota, Fla., where they will eventually make their home. George plans to do some deep sea fishing there.

"I have plenty of activities lined up," George says. "Retirement is healthier and happier that way."

New Sandia 'Spinoff' Film Now Available

"Spinoff," a new Sandia film, is now available for showings to the public. The 15-minute, sound, color film presents examples of technological developments at Sandia which have various industrial applications, e.g. ion plating and laminar flow clean rooms. Animation is used extensively to help explain basic scientific and engineering concepts. Arrangements for showing the film may be made by contacting Phyllis Swartz (3431), tel. 264-4207.

Sandia Speakers

J. C. Moody (2411), "Measurement of Ultra-Fine Surface Finishes," 22nd annual meeting of the Standards and Metrology Division, American Ordnance Association, April 12-13, Gaithersburg, Md.

L. S. Nelson (5234), "High Temperature Reactions of Pulse-Heated Microspecimens," United Aircraft Research Laboratories, April 11, East Hartford, Conn., and National Aeronautics and Space Administration, April 12, Hampton, Va.

M. J. Forrestal (1541), "Buckling of Shells Surrounded by Elastic Media," UNM Mechanical Engineering seminar, April 26, Albuquerque.

C. W. Harrison, Jr. (1425), "Some Applications of Electrodynamical Principles in Nuclear Weapon and Missile Development Programs," California Institute of Technology seminar, April 18, Pasadena.

G. J. Simmons (5612), "An Extension of the Application of Reproducing Kernels to a Sampling Theorem for Adaptive Systems," 19th annual Southwestern IEEE Conference and Exhibition, April 19-21, Dallas. He will also be chairman of the same session on estimation and pattern recognition.

D. M. Darsey (7334), "Wide Dynamic Range Remote Control System, a Theoretical and Empirical Study," 13th annual Institute of Environmental Sciences technical meeting and equipment exposition, April 10-12, Washington, D.C.

R. L. Alvis (5635), R. M. Bleakney and R. M. Oelsner (both 2451), "Fluid Power Applied to Hazardous Location Test Equipment," Third Fluidics Seminar, April 18-19, Milwaukee, Wis.

M. M. Robertson (1122), "Spectroscopic Measurement of the Nuclear Spin, Magnetic Moment, and Isotope Shift in Ar³⁹," Optical Society of America, April 12-14, Columbus, Ohio.

D. R. Anderson (1111), "Oceanography," junior high science classes, April 6, Aztec, N.M.

J. W. McKiernan (9331), "SNAP Projects," UNM Student Chapter, IEEE, March 14, Albuquerque.

M. J. Landry (9232), "Laser Applications and Holography," Science Teachers Seminar, March 17, Roswell, N. M.

R. M. Jefferson (5224), "Nuclear Reactor Safety," Evening Optimist Club, March 23, and Heights Optimist Club, April 5, Albuquerque.

Mary J. Harrison (3131), "The Heath Personality Theory," Business Woman's Association, March 27, Albuquerque.

Albert Goodman (5623), "Think Small," English class, Van Buren junior high school, April 11, Albuquerque.

D. M. Fenstermacher (7224), "Popular Astronomy," South Valley Optimist Club, April 12, Albuquerque.

G. W. Hughes (7224), "Mathematics," Del Norte high school, April 14, Albuquerque.

Kay M. Sadler (3126), "The Technical Secretary's Job at Sandia," secretarial class, T-VI, April 20, Albuquerque.

A. D. Bridegam (2211-5), "Precision Graphics and Programming Status Report," Annual Spring Meeting, APT Long Range Program, Illinois Institute of Technology Research Institute, April 10, Chicago.

A. J. Clark, Jr. (9330), "The Space Isotope Power Program," University of Washington nuclear engineering graduate school seminar, April 7, Seattle; Trinity Section, American Nuclear Society, April 28, Los Alamos; Advanced Operational Planning Steering Committee, Richland Operations Office, April 17, Richland, Wash.

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APRIL 21, 1967

SANDIA LAB NEWS

Scientific Expedition Group Back With Data and Experiences

Fifteen Sandians have returned from the recent scientific expedition that took 12 of them around the world and three to Alaska in two NC-135A jet planes.

One aircraft assigned to Sandia flew to New Zealand while the other one with Los Alamos Scientific Laboratory experiments flew to Alaska. From these bases, the groups conducted night flights to simultaneously gather data at two separate points on the auroral spectrum (northern and southern lights) and on cosmic rays at magnetic conjugate points.

Making simultaneous measurements of the atmospheric phenomena at the conjugate points, which are corresponding positions in the northern and southern hemispheres where magnetic field lines curve in a north-south direction around the earth and intersect the earth, was at times challenging. Aside from the anticipated communication difficulties between the widely separated planes, they encountered high winds which demanded special flying skills to coordinate aircraft positions. For example, the pilot of one plane had to throttle back because of strong tail winds while the other had to increase the power because his aircraft was heading into strong winds.

Because of these adverse conditions, the Sandians attribute much of the expedition's success to the skill of the Air Force crews.

There were about 20 scientists and technicians on each plane. In addition to Sandia and LASL personnel, other experimenters were from Lawrence Radiation Laboratory, Douglas Aircraft, University of Alaska, Naval Ordnance Test Station and EG&G, Inc. Sandia experimenters were M. M. Robertson (1112) and James R. Keith (5234).

After the auroral studies were completed in mid-March, the LASL aircraft returned to Albuquerque while the Sandia plane proceeded on its flight around the world to measure the distribution and intensities of cosmic rays and air glow as a function of altitude, latitude and longitude.

While the Sandians reported on varied experiences, they all shared the opinion that readying the equipment for the flights, the seven-hour night flights and sleeping during daylight hours left little time for sightseeing. However, they gathered some memories during the free hours.

About the same time that R. W. Martin, B. R. Stanton and R. M. Caster (all 7255) were skiing or inspecting earthquake damage around Anchorage, the other group of Sandians was touring New Zealand.

On Guam during a refueling stop, the Sandia group that circled the earth caught a brief glimpse of "Air Force One" which took President Johnson to the Guam conference last month. They also toured the large game preserve near Nairobi; some shot the rapids near Manila; two were police-court witnesses to an accident in Ceylon; and a few used flashlights to watch giant turtles paddle up on Ascension Island beach to bury their eggs at night.

Commenting on Ceylon, Robert Taylor, supervisor of Diagnostic Aircraft Section 7255-3 and the Sandia aircraft mission coordinator, said the traffic impressed him immediately. The traffic flow was made up of bicycles, people on foot, double-decker buses and elephants. Perhaps it was the elephants that induced Bob and Dick McKnight to hire a cab. A short time later the cab struck a pedestrian, and Bob and Dick appeared as a witness. Everyone at the police station, he reports, was very courteous and considerate.

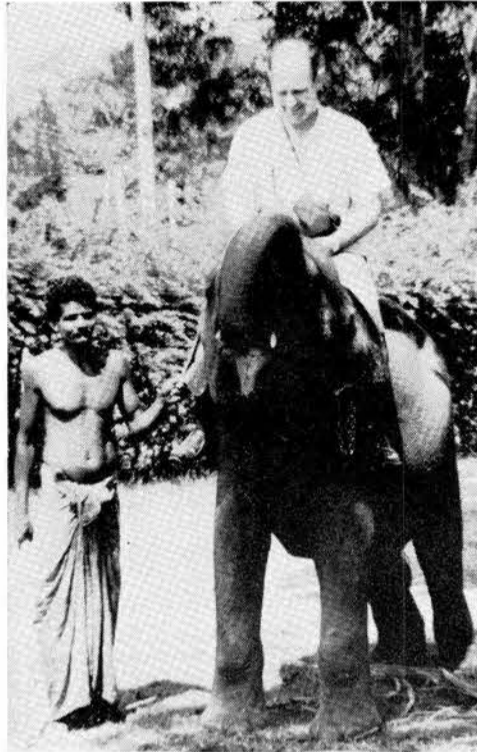
Because of its international atmosphere, Bob decided to attend an Easter holiday dance in Ceylon. Equipped with camera and color film to record the unusual costumes and oriental dances, he found the people attired in western clothes doing the twist.

By prearrangement, V. D. Nogle (7255) visited with a married couple in Kenya. The couple, who are with the African Inland Mission, had traveled over 100 miles from a remote outpost to meet with Vaughn. They took him to visit the Kijaba mission school. After the 45-mile trip over a back road, Vaughn was surprised to find the name of Teddy Roosevelt and the year 1909 inscribed on the school's cornerstone. The former President had laid the cornerstone during one of his safaris.

Memories like these will probably remain with the Sandia participants for many years and the scientific data obtained should provide another step toward our

understanding of atmospheric phenomena.

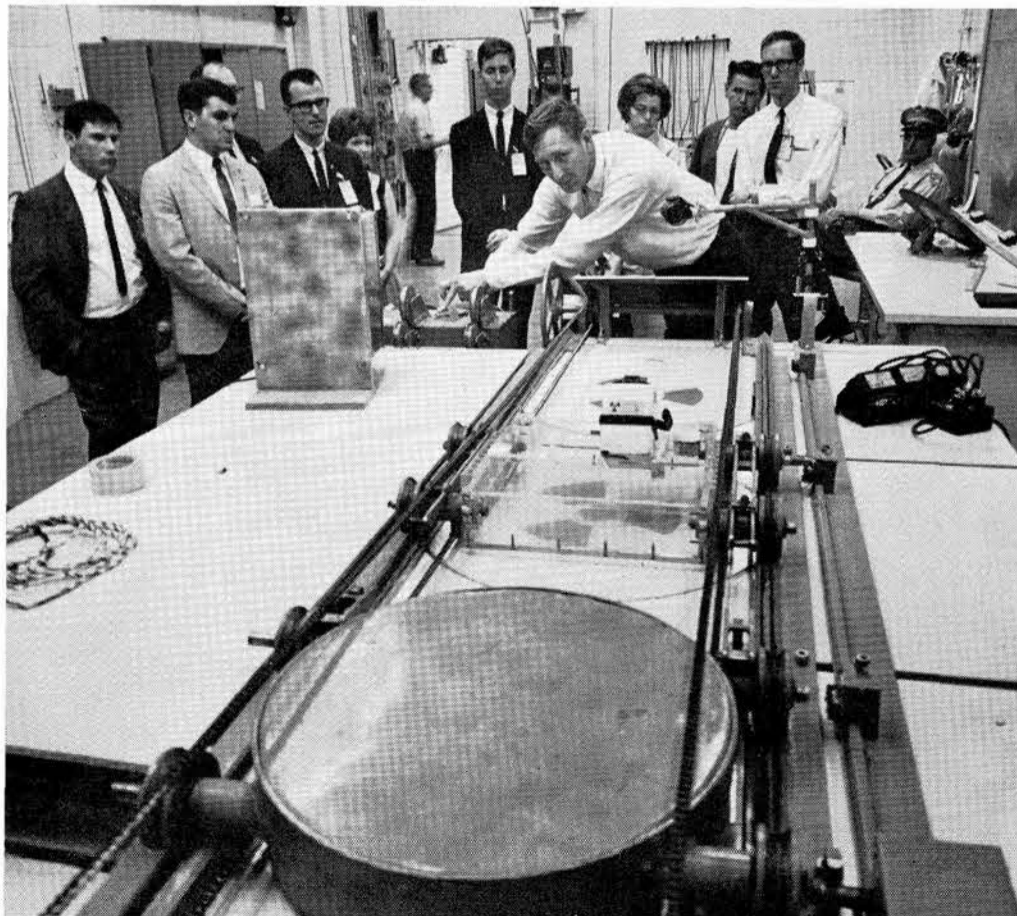
Other Sandians on the globe-circling flight were R. A. Bice (7000) and from Diagnostic Aircraft Operations Division 7255, W. L. Bierly, J. C. Hays, R. C. Hewitt, S. S. Markowitz, D. A. Mayhew, H. F. Sisson, and P. B. Vandenberg.



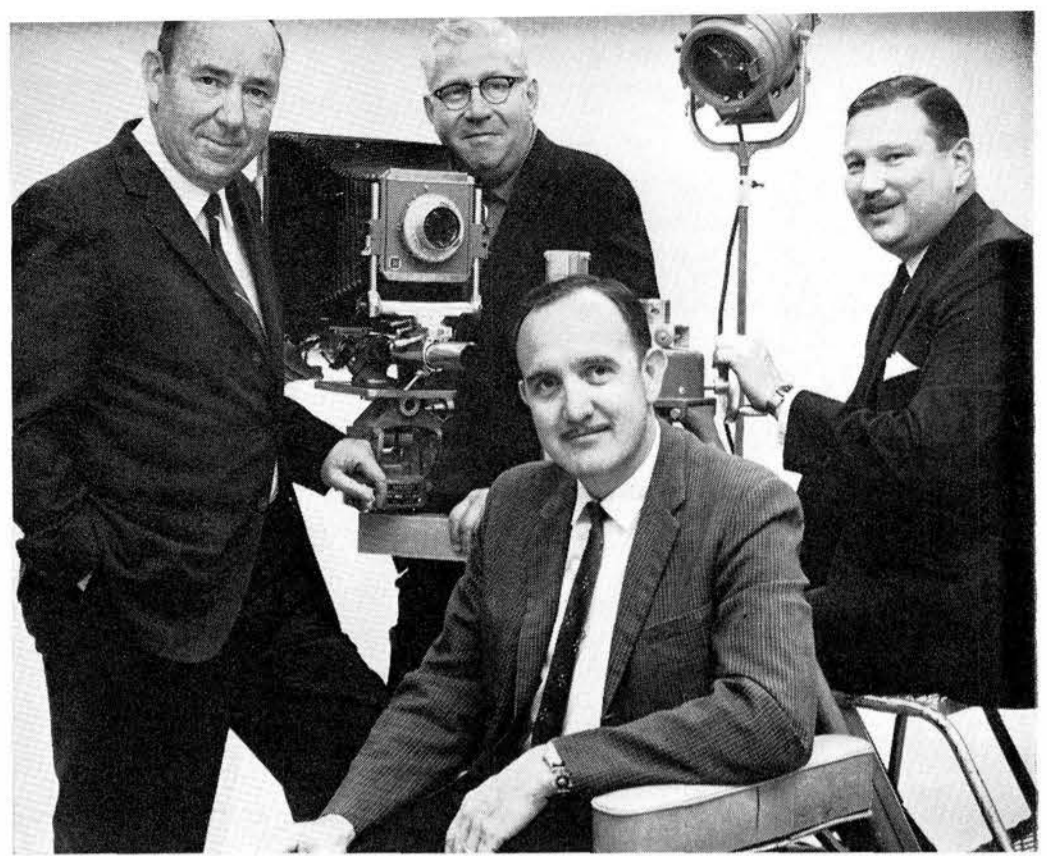
J. E. KEITH (5234) in Ceylon.



B. R. STANTON (7255) near Anchorage, Alaska.



CALIBRATION of a radiation monitoring instrument was demonstrated by W. W. Taylor (2411) to students from Oklahoma State University's Radiation Technology Curriculum technical institute program during a recent tour of Sandia Laboratory.



NEW OFFICERS of the New Mexico Industrial Photographers Association include Louis Erne, president; in foreground, and standing (l to r) Robert Matthews, member of the board of directors; Richard Hodges, board member; and Elliot Harris, second vice president. All are in Industrial Photographics Division 3465.

Take Note

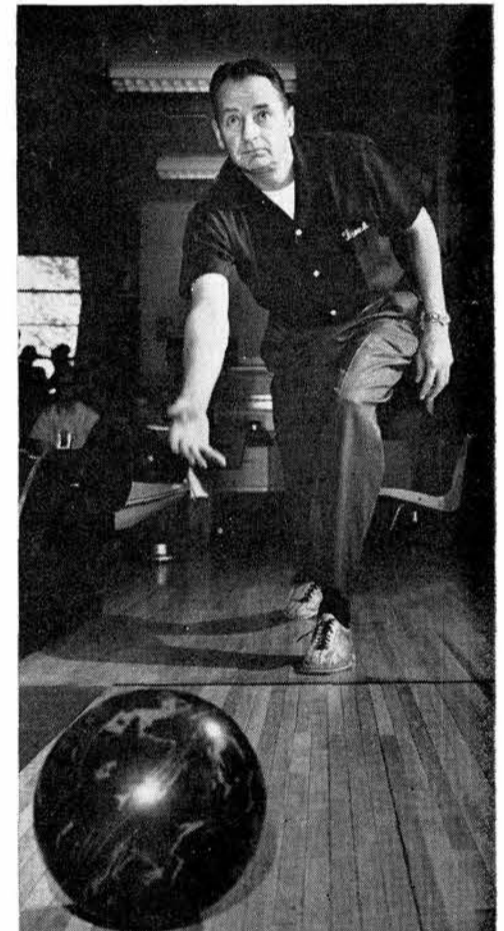
Art Pino (2551) is helping to organize a new Little League baseball district in Albuquerque. The new district consists of all of the City south and east of a boundary line that runs north on Louisiana to Central, east on Central to Eubank, north on Eubank to the Freeway and east on the Freeway to the city limits.

Parents of boys ages 8 through 12 are urged to contact Art, tel. 299-6544, if their youngsters are interested in playing Little League baseball or if the parent wishes to help with organization or coaching.

V. E. Arnold (2564) presided over the morning session of a symposium on techniques in experimental stress analysis, sponsored by the Rocky Mountain District of ASTM, at the University of Denver on April 14.

Mr. Arnold is district vice chairman. Four technical papers were presented and ASTM President J. B. Rather, Jr., spoke on ASTM's role in air and water pollution control.

Gertrude M. Byrne (3154) will be guest speaker for an American Management Association course on Managing the Modern Office Services Organization in San Francisco, April 17-21. Miss Byrne's subject is "Managing Secretarial Services."



Frank E. Abbott, director of Requirements and Facilities Division, AEC/ALO, set two new tournament records while winning both the singles handicap with a 670 and singles scratch event with a 739 in Sandia Lab's third annual bowling tournament March 11-19 at Fiesta Lanes. A total of 138 individuals competed in the various events.

C. M. Warthen (7256) and K. R. Jones (2211) also broke a tournament record with a 1221 to win the doubles scratch trophy and they also took the doubles handicap trophy with a 1314. R. M. Dayhoff (9314) won the all events scratch trophy with a 1736 and J. E. Sieglitz (4516) took the all events handicap with 1905.

The team event was captured by D. R. MacKenzie (9322), F. E. Anderson (2411), D. J. Hillard (4136), G. M. Austin (4514), and W. R. Hereford (7216). An all spare game special award went to J. M. Scott (2213) with a 187.

R. J. Eisold (2213) and R. M. James (3133) were co-directors of the tournament.

New president of the Albuquerque Area Council on Alcoholism is Camille McRae, test coordinator and counselor in Organization and Manpower Division 3133. She was chosen to head the group, following her re-election as a member of the board of directors.

She has a Master's degree in guidance and counseling and was a counselor in the Albuquerque Public School system before joining Sandia last November.

AEC Observes 20th Anniversary Mark

This year, the United States Atomic Energy Commission observes its 20th anniversary. The following article is a summary of AEC achievements. The emphasis is on contributions to the benefit of mankind. Sandia Corporation, which has contributed to the development of the nation's nuclear weapon arsenal, is an integral part of the AEC success.

The Atomic Energy Commission marks its 20th birthday this month with a feeling of satisfaction that the peaceful atom is in the greatest period of growth.

More than 50 percent of all the new steam-electric generating capacity announced by U. S. companies in 1966 was nuclear. The uses of radioisotopes in such fields as medicine, research, and agriculture are at an all-time high.

At the same time, the Commission's work in weapons development and nuclear propulsion has made significant contributions to the nation's peace keeping force.

In looking ahead, the Commission foresees the possibility of new and exciting uses for the atom—to power desalting plants, to send rockets to the moon and beyond, and to extend food supplies by preservation.

When the Atomic Energy Commission took formal control of the nation's atomic energy program in 1947, the program was almost entirely weapons centered. But in 1966, national defense and the peaceful atom shared about 50-50 in AEC's money and efforts.

The two decades from 1947-1967 were years of search and decision. In retrospect, some decisions stand out—the decision to support the broadest possible range of research; to continue using contractors to operate the programs; to invest millions of dollars in demonstrating the atom's ability to make electricity.

1947-1954: The Years of Secrecy

With the threat of an atomic holocaust on the one hand and the promise of a prosperous atomic peace on the other, the 1946 Atomic Energy Act was passed half in fear, half in hope. It fell to the AEC (which President Truman called "the most important branch of government to be created in a hundred years") and to the Joint Congressional Committee on Atomic Energy to allay the one and fulfill the other.

On Jan. 1, 1947, AEC took over a sprawling complex of men and equipment from the Army's Manhattan Engineer District, which had built the first bombs. Included were three towns, 6000 military men and government workers, and many problems—the worst being the precarious state of the atomic arsenal.

AEC had little choice but to concentrate most of its efforts on weapons. It meant rehabilitating Los Alamos and Oak Ridge, solving the uranium shortage and production problems, and re-establishing the research and development programs for weapons.

It also meant the peaceful atom, which mankind had discussed so excitedly since 1945, would have to wait.

During this period, AEC and the military were strong supporters of fundamental physical research in this country. As far as AEC was concerned, as its second semi-annual report stated, "The vigorous support and stimulation of both fundamental and applied research . . . are essential. . . . Tomorrow's military and civilian applications . . . depend on today's research."

Widely dispersed research projects also helped train young scientists, and AEC created a climate which allowed unprecedented freedom for the individual researcher working under a government contract.

One of the results was an explosion of knowledge in basic physics and chemistry—for example, the sub-nuclear particles to man-made elements heavier than uranium, the heaviest natural element.

Even purely military programs had long range benefits by producing technology which would one day be turned to civilian uses.

Another of the early Commission's decisions which had long range benefits was to continue the Army's policy of using contractors to conduct the programs. When the government monopoly on atomic information and sources ended, AEC contractors formed an educational and industrial nucleus on which a private industry could build.

By 1953, the U. S. had a strong, diversified weapons arsenal; the H-bomb had been tested; the first nuclear submarine nearly completed; a domestic uranium in-

dustry born; and a long term overseas supply of uranium assured. Old laboratories had been strengthened and two new ones built (Argonne and Brookhaven).

On Dec. 8, 1953, in a historic speech before the United Nations, President Eisenhower proposed an Atoms-for-Peace program and an International Atomic Energy Agency. That speech eventually led to the 1954 Atomic Energy Act and the first major shift in AEC's course.

1954: The Opening Door

The Atomic Energy Act of 1954 marked a turning point not only for the Commission, but also for industry and education. Replacing the 1946 Act that had been based on secrecy and government monopoly, the revised law encouraged the development of a private atomic energy industry both at home and abroad.

The 1954 law called for declassification of much that had been restricted, broad distribution of declassified information, industrial participation in developing peaceful uses of atomic energy, and a program of international cooperation that boldly supplanted the former secrecy.

Immediately a committee of senior reviewers was convened to declassify thousands of non-defense documents. (The work continues with Sandia's Vice President R. W. Henderson serving as a senior reviewer.—Ed.)

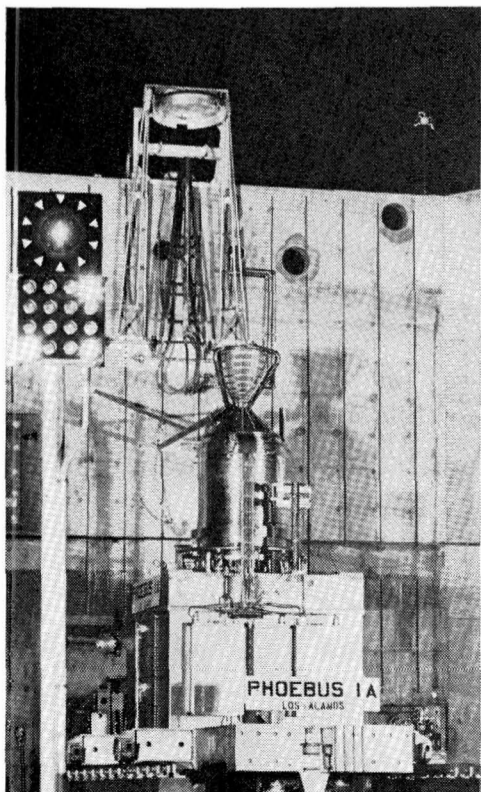
The Commission realized that neither industry nor the universities could absorb more than a decade of scientific and technical information overnight. So it began a broad education program—using the information that had been restricted only months earlier—to train scientists for industry, universities, and the AEC itself.

The Commission also began a long range program to inform the public. In the past, AEC has been able to distribute little information to the public except through its semi-annual reports to Congress. After 1954, the AEC made available thousands of scientific papers and documents, booklets on the fundamentals of atomic energy, and accounts of current AEC projects.

The 1954 law also opened the door for other nations. In contrast to its former silence toward other countries, the AEC in 1954 was able to join in planning for the first international conference on the peaceful uses of atomic energy. And shortly after the Act was signed, the United States allocated the first 100 kilograms of uranium-235 to the new Atoms-for-Peace program, with appropriate safeguards to prevent diversion to military use.

Within a year the AEC had signed agreements with four nations for the exchange of information on peaceful uses of nuclear energy. It began to allow and encourage U. S. industry to build power reactors abroad. Soon the United Nations had approved the U. S. proposal to establish an International Atomic Energy Agency.

In addition to its cooperation on the peaceful uses of atomic energy, the United



LASL's PHOEBUS 1A is part of the continuing Rover program to develop the technology of nuclear-powered rockets capable of extensive space exploration.

States, in 1963, joined more than 100 nations in a treaty signed by President Kennedy to end nuclear testing in the atmosphere, outer space, and underwater.

Perhaps the most significant change caused by the 1954 Act was the end of the AEC's monopoly on reactors. Industrial and educational organizations could now own and operate a variety of reactors, including power reactors for the generation of electricity.

In 1963, when 17 power reactors were being operated or constructed, Jersey Central Power and Light Company jolted the utility industry by announcing that economics had led it to select nuclear power for its new Oyster Creek, N. J., plant. The company said the atomic plant—would be built entirely with private funds—would be the least expensive type of electric generating facility it could build and operate.

The utility industry's reaction was not readily apparent. No nuclear generating plants were announced in 1964.

In 1965 the utilities industry announced plans for 10 nuclear plants. In 1966 the number leaped to 27 including two 1,000,000 electric kilowatt plants to be built in a low-cost fuel area by the Tennessee Valley Authority. Recently the AEC predicted that atomic power will be generating up to 25 percent of the nation's electricity by 1980 (80 to 110 million electrical kilowatts) and one half by the year 2000.

1964 to the Present

For 20 years, AEC has backed research on radiation, reactor safety, and nuclear safety in general, and established and enforced safety rules. Under AEC's control, the nuclear industry has proven to be one of the safest in the country, with AEC and its contractors winning 10 safety awards in the last 11 years.

The two years since 1964 have seen the coming of age of many of AEC programs, the surge in power reactors, for instance, but there are other signs as well . . . The uranium industry is gearing up to meet the needs of the new nuclear power industry; AEC has turned over to industry production of 36 radioisotopes; new companies have been brought into the nuclear field through a spreading of the Commission's contract work; 800 colleges and universities now have some type of equipment for teaching nuclear science as a result of AEC's equipment grant program; and, the United States cooperates with 50 nations, the International Atomic Energy Agency, and the European Atomic Energy Community on the peaceful uses of atomic energy.

The first privately owned fuel processing plant opened in 1966; the nuclear ship Savannah finished its first year as a commercial ocean freighter; and for the first time AEC's budget was devoted as much to the peaceful atom as to defensive weapons.

Radioisotopes have been one of the greatest contributors to the fulfillment of the peaceful atom. Recognized since the 1930's as valuable tools, they were never plentiful until the early 1950's. Today more than 10,000 individuals and institutions are licensed to use them.

Radioisotopes have given man an entirely new concept of his body's processes and have revolutionized bio-medical research. Cobalt 60 is used in cancer research and therapy; iodine 131 helps combat thyroid disease; and in December 1966, doctors used isotope tracers in saving the life of an unborn child.

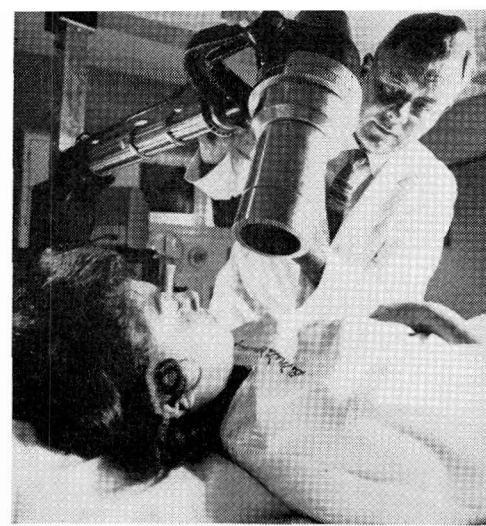
Among other services in 1966, radioisotopes also powered a satellite transmitter for the fifth straight year; gauged the thickness of carpet; and tested aircraft structure.

As its programs have grown, so has AEC. Its 1966 budget was \$2.4 billion. It employs 7000, and its contractors employ more than 100,000. Its four original divisions are now 33, including five in the independent regulatory arm which was separated from the operational side in 1961.

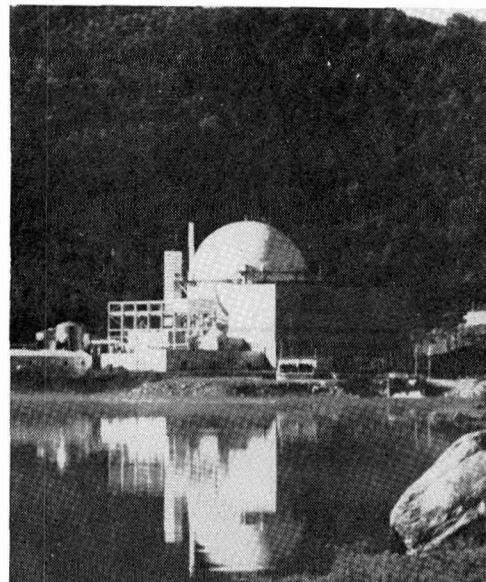
1967 and Beyond: Promise for Tomorrow

It is clear that nuclear energy will play an increasingly important and beneficial role in the future. In the next few years, it is expected to contribute to President Johnson's "Water for Peace" program which stresses the importance of economically desalting sea water as a supplement to the world's fresh water supply.

In the more distant future, there may be huge new cities built in areas now considered unfit for living. Giant nuclear re-



RADIOACTIVE IODINE is used in the diagnosis of thyroid diseases at the Medical Research Center, Brookhaven National Laboratory.



NUCLEAR POWER PLANT at Rowe, Mass., operated by the Yankee Atomic Electric Co., produces enough heat to generate 141,000 electrical kilowatts.

actors, which will pollute neither air nor water, will supply cheap power to air condition the city, fuel its homes, and recharge the batteries of its electric—and pollutionless-cars.

Nuclear power plants in the ocean will pump up and process much of its mineral wealth, while desalted water from the sea irrigates the desert and increases the world's tillable land.

Nuclear ships will harvest and herd food from the sea, keeping it fresh and palatable with shipboard irradiation. Such ships will navigate by isotope powered satellites and may dock in harbors created by nuclear explosives.

Away from the cities, huge industrial centers built around other nuclear reactors may reprocess all of the community's scrap into new usable materials, creating a junkless society.

In outer space, nuclear powered rockets may carry man to the moon and beyond, and ferry men and equipment between planets and space platforms which themselves will depend on nuclear power to sustain a habitable environment.

Such wonders, while still only speculations, are possible. They will depend on the decisions to be made today, tomorrow, and in the next 20 years.

Sandia Authors

Irving Auerbach (9326), "Irradiated Polyethylene I. Free Radical Decay," June 1966 issue, and "Irradiated Polyethylene II. Free Radical Formation," February 1967 issue, POLYMER.

O. E. Jones (5133), "Piezoelectric and Mechanical Behavior of X-Cut Quartz Shock Loaded at 79°K," February issue, REVIEW OF SCIENTIFIC INSTRUMENTS.

L. F. Shampine (5262), "Monotone Iterations and Two-Sided Convergence," December 1966 issue, SIAM JOURNAL OF NUMERICAL ANALYSIS.

M. M. Robertson (1122), A. N. Cox, D. H. Liebenberg, R. R. Brownlee, and P. Rudnick, all of Los Alamos Scientific Laboratory, "Racing the Moon's Shadow," February issue, SKY AND TELESCOPE.

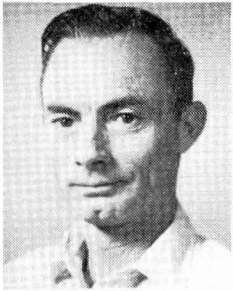
W. Dale Jones (2542), "Designed Defect Prevention," December 1966 issue, ASTME JOURNAL.

P. B. Bailey (5261), "On the Interval of Convergence of Picard's Iteration," February issue, NOTICES OF THE AMERICAN MATHEMATICAL SOCIETY.

E. C. Chare (5141), J. R. Freeman (consultant), and R. C. Waag (employee on military leave), "Magnetically Imploded Metal Foils," February issue, APPLIED PHYSICS LETTERS.

Service Awards

20 Years



C. C. Bates
4224

15 Years



Florencio Baca
4574



W. W. Bach
2431



J. A. Balaban
8154



J. D. Baldonado
4254



J. H. Banker
7226



R. B. Barry
7332



R. R. Beach
2453



C. D. Boxx
7532



Shirley Cleary
4363



J. H. Davis
7253



L. F. Desmet
4514



C. A. Fawver
2222



Ricarda Gallegos
3411



K. H. Lloyd
2223



Mollie Miller
3152



Estelle Richardson
2410



C. E. Sandy
1432



H. M. Warden
3428



R. H. Watkins
8143



B. G. West
2554

10 Years

April 21 - May 4

J. M. Hueter 2563, Joyce V. Johnson 4152, K. A. Peters 631, C. F. Wilson, Jr. 7226, Virginia L. DeWitt 3126,leanor R. Kelly 3151, M. L. Armijo 4574, G. F. Romero 614.
J. R. Russell 4614, J. R. Ashcraft 9421, Abelicio Molina 212, Adam Ramirez 4574, J. E. Healey 8127, F. W. Oswalt 564, F. B. Arensdorf 3465, Mary H. Hall 7221, A. R. Baldwin 1323.
N. C. Widenhoefer 1332, J. M. Lewis 1333, J. H. McCutcheon 334, W. T. Corbett 1433, W. F. Sefcik 2213, P. E. Eyer 225, W. E. Scott 2225, R. C. Schreiner 4137, Louis Perea 614, R. D. Myers 9226, W. B. Shepard, Jr. 2114, J. A. Silva, Jr. 7256, and J. R. Goff 7332.

Bowler Goes National

Evelyn Ricard (3153) will be the official New Mexico delegate to the Woman's International Bowling Congress, Inc., to be held May 1-3 in Rochester, N.Y.

Since this will be the organization's 50th anniversary, many special events are planned including a parade of state flags (carried by the official state delegates).

More than 6000 teams will compete in the national tourney and this will be the 22nd such tournament in which Evelyn has bowled. She is also a member of the Woman Bowler's Pioneer (20-year) Club.

As secretary of the state organization for women bowlers, she has been responsible for drawing up schedules and making other arrangements for the state tournament being played-off over four weekends this month in Hobbs.

Waldo Hunter Helps Save \$32,000 In Five Cost Improvement Actions

Waldo Hunter, supervisor of Motion Picture Film Processing Section 3465-3, has been instrumental in five cost improvement actions which will save Sandia \$32,000 in the next two years.

The actions are centered around processes and methods used in Industrial Photographics Division 3465. P. R. Miller, C. H. Dalin, Jr., and Sol Chavez contributed to the cost improvement concepts and implementation.

In one of the cost improvement actions, Waldo applied a principle known to movie film processors since the 1930's to recover silver from the fixer solution used in color film processing. Existing electrolytic cells for this purpose in other laboratories were bulky, slow and required a special installation and pumping system located above the automatic processing equipment.

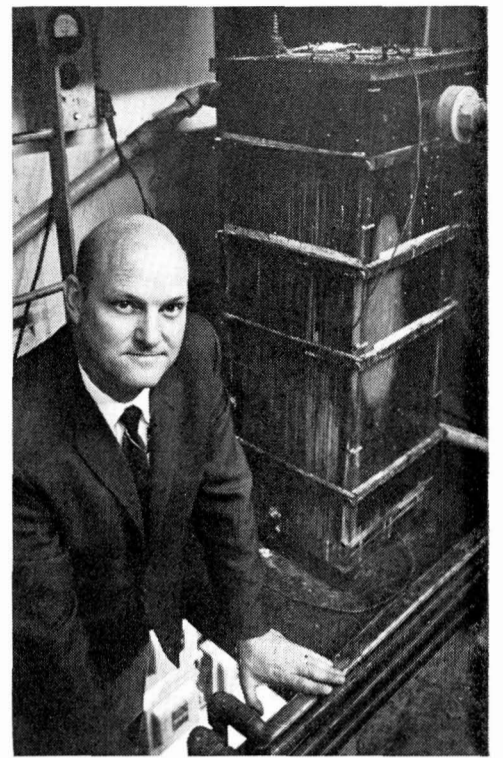
There wasn't room in Sandia's processing lab in Bldg. 863 for this kind of equipment. So Waldo designed a compact electrolytic cell which could be used with the existing pumping system. The new cell will recover silver worth \$3000 within the next two years. In addition, it filters the fixing solution and greatly extends the useful working life of the chemical.

In addition to the electrolytic cell in the color film processing equipment, a chemical displacement cell has been installed. Two other chemical displacement cells have been installed in the black and white film processing areas.

In another of the cost saving actions, P. R. Miller (who had just attended a Value Engineering Workshop) initiated an investigation of the kind of chemicals purchased for film processing. He determined that a change from reagent grade sodium acetate to "photo grade" sodium acetate would save the Company about \$1700 per year.

The other actions centered around operations of the Company's copy camera, used to make photographic negatives for the print shop, and conversion of these negatives to printing plates.

Waldo converted the camera's film holder to accept a smaller size film. He designed a pin-alignment system for the film positioning used in conjunction with the camera's copy board. A small computer, which Waldo built as an experiment,



WALDO HUNTER (3465-3) inspects his silver recovery cell recently installed in the color motion film processing laboratory in Bldg. 863. This unit will recover about \$3000 in silver from the fixer solution during the next two years.

proved successful for calculating the exposure factors and bellows extension of the camera. The result has been a reduction in the exposure time of film from an average of 15 seconds to one second. The entire operation of the copy camera, film alignment and copy positioning has been made more accurate and more rapid. The pin-alignment system also speeds the plate-making process. These actions account for the remainder of the cost improvement total.

"Since the emphasis on cost savings started at Sandia," Waldo says, "we have systematically examined every aspect of our operations with an eye to improving efficiency and saving money. We are still working at it."

SHOPPING CENTER

SHOPPING CENTER

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SHOPPING CENTER

CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday. A maximum of 125 ads will be accepted for each issue.

RULES

1. Limit: 20 words
2. One ad per issue per person
3. Must be submitted in writing
4. Use home telephone numbers
5. For Sandia Corporation and AEC employees only
6. No commercial ads, please
7. Include name and organization
8. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

FOR SALE REAL ESTATE

- LINE ACRES, Tome Johnson, 255-5427.
BDR. HOUSE w/den, carpeted, redecorated, fenced back yard, AC, near bases, sell or rent \$115/mo. unfurnished, available May 1. Downs, 296-4710.
IVE ACRES, excellent water, 3-bdr., 1 1/2 bath trailer, screened porch, 15 miles east, large equity, will trade. Boyd, 282-3331.
ORRALES ADOBE home, 1 acre, 2 fireplaces, 2 1/2 baths, landscaped, AC, stables, 4 yrs. old, custom drapes, Frigidaire all-elec. kitchen. Haley, 898-3041.
BDR., 1 3/4 bath, den, brick fp, built-ins, separate DR, dbl. garage, carpeting, drapes, landscaping, FHA \$20,625. Seaver, 298-4815.
MOSSMAN 3-bdr., paneled den, fp, DR, sewing closet, pantry, central hall, large lot, trailer parking, appraisal \$21,725. Moore, 299-3758.
BDR. MANKIN, carpeted, attached garage, screened patio, near Eubank & Candelaria. Dyer, 299-3231 after 5:30.
NOW EXECUTIVE, 3-bdr., 1 3/4 bath, carpeted, AC, landscaped, over 1800 sq. ft. living area plus garage. Holt, 299-5943.
IX ROOM ADOBE house, 95' frontage on 4th NW, \$1000 down. Guest, 344-6554.
BDR., lg. kitchen w/extra built-ins, fenced, landscaped, \$1000 assumes \$87/mo., 5/4% FHA payments. Stomp, 298-3824.
BERSON 3-bdr. w/fp, 1 3/4 bath, 9504 Alta Monte NE. French, 299-8064.
BDR., built-ins, AC, carpet, tiled entry, low down and assume present 5 3/4% loan. Brane, 299-0148.
RICK VENEER 3-bdr., 2 baths, lg. kit. liv. & DR, fa. den, 2257 sq. ft., dbl. garage, NE Western Skies. Williams, 298-4602.
BDR. HOME, attached garage, very small down payment, take over mortgage payments \$88/mo., includes taxes and ins. 2738 Santa Cruz SE. 243-0180.
1/2 ACRES LAND, Frost Rd., 1 mile East of N10 State Highway, \$3750, terms. Simott, 299-1300.
BDR., 1 1/2 baths, near Base, FHA appraisal \$13,350, make offer, 340 Moon NE. Bouton, 299-5591 after 5:30.

CARS AND TRUCKS

- '62 MERCURY COMET station wagon, 4-dr., AT, R&H, AC, bucket seat console, WSW tires, \$745. Black, 299-3369.
'67 CHEV. pickup, 1/2-ton LWB, AT, V8, lots of extras, see at Terrace Trailer Park D-19. McGarvie, 298-3364.
'59 ENGLISH FORD, \$175 or best offer. Monson, 298-7969.
'57 CHEVROLET 1/2-ton 4-spd., R&H. Vallejos, 243-3684 after 6.
'64 PLYMOUTH Belvedere, slant six engine, light tan, AT, AC, \$1195 firm. Kreidler, 299-8494.
'61 RAMBLER wagon, PS, PB, AT, \$550 or trade for boat and motor. Long, 256-1683.
'65 DODGE Coronet 500, 2-dr. HT, V8, bucket seats, console, AT, R&H, \$1750. Garcia, 265-1179 after 5.
'56 CHEVROLET BelAir sedan, 4-dr. Smith, 255-7389.
'64 CHEVELLE convertible, Malibu super sport, PB, bucket seats, console shift, R&H, 19,500 miles, \$1125. Eggert, 256-7845.
'65 INTERNATIONAL Scout, doll-up model, 4-wd., R&H, defroster, low mileage, \$1800. Millard, 296-1272 after 6.
'65 EL CAMINO, 283 V8, OD, bucket seats, Positraction, R&H, low mileage, less than retail. Richardson 299-3673.
'61 CHEVROLET Bel Air 2-dr. sedan, std. trans., 6-cyl., R&H, \$200. Moreno, 298-3416.
'62 RAMBLER American deluxe, \$450. Treadwell, 256-3018.
'56 CHEVROLET 4-dr. sedan, R&H, new interior, \$250; '59 Volkswagen, R&H, new interior, \$550. Kilmer, 268-8402.
'57 PONTIAC V8, R&H, air, new muffler, recent tune-up, 4-dr., \$195. Johnson, 255-2846.

MISCELLANEOUS

- UNDERWOOD standard typewriter, \$30. Fitzgerald, 298-8851.
GIRL'S 20" and boy's 20" bicycles, both for \$18. Garcia, 256-6609.
ROTARY lawn mower, \$22.50; handmade quilt, \$20. Loemker, 344-0278.
GUITAR, classical, rosewood, handcrafted by Pimentel, \$400 or best offer, will consider trade for motorcycle. Chavez, 265-1146 after 5:30.
RUG & PAD, used one year, brown nylon 50L, 12x12, \$50; pair 6:70/7:00x13 snow tires w/wheels, \$25. Allen, 256-0290.
JACOBSON rotary mower, \$100; GE auto. washer, 18 mos. old, \$100; 55 sq. yds. green nylon carpet, \$100. Hansen, 268-3261.
ELECTRIC reel lawn mower, old but works, \$5. 3421 Dakota NE, Mikkelsen, 268-1485.
3-SPEED English racer 26" Schwinn boy's bike, \$30; maple bunk beds, can be separated into twin beds, \$35. Deterie, 299-1868 after 5.
9" RADIAL ARM SAW, Sear's model, originally \$100, now \$65. Logsdon, 344-7276.

- PHOTOMIC F. light meter-view finder for Nikon F camera, \$25. Cundiff, 256-0043, 5905 Constitution NE.
TUBE TESTER, PACO T-60, \$5; Heathkit condenser checker, \$10. Womelsdoff, 299-6269.
ROSE SILK lace sheath dress, size 10, never worn, price tag \$50 still on dress, sell for \$25. Johnson, 344-7877.
2 EARLY AMERICAN lamp-type chandeliers, brass finish, 3-way switch. Fox, 256-2606.
GIRL'S white figure skates, size 6, \$2.50. Stromberg, 1029 California SE, 255-6131.
BIRD CAGE, round, 45 inches tall, on metal stand, \$8.50. Fosmo, 268-8563.
TENT CAMPER, Western Field 1966 model, off-the-ground sleeping for four. Visbeck, 298-0380.
BUNDY B-flat clarinet \$75; lawn mower, manual, \$9; outboard motor, 5hp, \$52; car top rack, \$12. England, 299-0464.
HEAVY-DUTY equalizer trailer hitch, cost \$125, sell \$65 see after 5:30 except Saturday, Arnold. Space 31, Sundown Trailer Court, 4221 Central NW.
8MM movie camera, Yashica 8-E111, 3-turret lenses, \$25. Fortner, 255-4369.
HAMMARLUND model 110 amateur bands receiver w/SSB, \$125. Harris, 268-7955.
CHOCOLATE male miniature poodle, registered AKC, \$32 or trade. Biesecker, 877-6564.
POWER MOWER, reel type w/4hp gas engine, grass catcher, \$25. Gutscher, 298-6563.
CONSTRUCTION material left from remodeling: sliding glass door; medicine cabinet; electric fixtures; switches; front door & screen, etc. Judd, 255-0167.
WASHING MACHINE, 5 mos. old, 14-lb. mini-basket, top loading, original cost \$229, sell for \$150. Atkinson, 299-7536.
VACUUM CLEANER, Hoover upright w/attachments, \$25. Miller, 268-5992.
SOLID MAPLE single bed w/mattress, \$25; double kitchen sink, \$7.50; electric wall heater, \$5; floor furnace, \$30. Schuster, 256-0029.
DISHWASHER, portable Hot Point, new motor, new timer & hoses, needs bottom basket, \$60. Beach, 299-2990.
20" BICYCLE, convertible boy's or girl's, has training wheels, \$7.50. Tidwell, 298-5086.
'67 YAMAHA 100cc trail bike, 300 mi., sell or trade for bigger bike. Cobb, 268-3151.
BLENDER, Shetland 2-spd., 3/4hp, used 6 times, \$9.50; air cooler, evaporative car, Ward's model No. 61-6246, 6-volt, \$9.50. Ristine, 298-8383.
BICYCLE, boy's 20" Schwinn, \$20; gas dryer, Norge, \$25. Littleton, 299-7467.
PIANO, Buch & Gerts upright. Weldon, 255-5050.
TWO Williamson 30-watt ultra linier amplifiers, ideal for stereo, \$30. Mosteller, 256-3227.
4-TON MUELLER A coil for refrigerated air conditioning, \$75. Steck, 299-2313.
FREE: puppies, 3 male, mixed breed, about 4 mos. old, in need of homes. Moody, 282-3466.
WINDOW FAN, expandable sides, window air conditioner, 14,800 BTU. Tucker, 344-4240.

- GUITAR, Kingston classic w/nylon strings, \$25. Summers, 299-4674.
FRAZIER rototiller, 5hp heavy duty, 2 spare tires, dozer blade & spare chassis, \$90. Hoke, 298-2384.
14' ALUMINUM BOAT, 35hp motor, electric start, trailer, 2 spare tires, skis, total \$495. Flowers, 282-3458.
BOY'S 26" Schwinn bicycle; ice skates, 1 pr. boy's size 5, 1 pr. girl's size. 5. Owens, 255-9257.
TRAILER, 4'x6' w/lights, '67 tags, \$30 or best offer; 21" portable GE TV, \$25; 250cc motorcycle w/helmet & spare parts, \$100. Heidrich, 344-7669 after 5:30.
JEEP TRANSMISSION w/OD, complete, \$25. Frasier, 299-6933.
FLUTE, recently reconditioned \$65, 1424 Hoffman Dr. Thayer, 299-3127.
HARLEY DAVIDSON 74 FLH; guitar, 3-pick-up, new, gold glitter, solid body. Gallegos, 154 Chama NE.
FRENCH Provincial 40" round dining table, 4 chairs, \$100; lingerie chest \$50; two matching beige brocade occasional chairs, \$20 ea. Kahn, 299-3377.
BIKE, girl's 24", \$10. Curry, 298-5028.
.38 CAL. Wad-cutter bullets sized and lubricated, 2 cts. ea.; \$20 electric portable humidifier, \$7; magni-focuser, 5-power, \$5. Larsen, 255-6407.
KODASLIDE projector, master model, 1100 watts, equipped w/500-watt lamp, \$15. Krebs, 296-2710.
BC-603/BC-604 receiver-transmitter, BC-659 transceiver w/citizen's band crystals, \$15 ea. or both for \$25. Wade, 299-2050.
LESLIE ORGAN SPEAKER, model 51C, 2-channel 50-watt amplifier & 4 speakers in walnut cabinet. Birchler, 268-0726.
RED TRICYCLE, \$8; Magnavox w/separate speaker, mahogany cabinet, monaural, \$40. Miller, 256-6020 after 6.
RANGE HOOD, 48", twin blowers, light, copper-tone w/back and side splashboards. Smith, 268-2141.
WASHER & DRYER, Speedqueen, \$100 for the pair. McMaster, 6308 Kiowa NE, 268-8062.
TRANSMITTER, model DX60 w/WFO, cost originally \$100, sell for \$60. Rowe, 299-5678.
BLOND TWIN BEDS, complete, \$70; deluxe dress form, \$10; Hoover vacuum cleaner, \$22. Browne, 344-9675.
BOAT, 17' Aristocrat, hard top, 80 hp Mercury motor. Glover, 877-3354.
FULL LENGTH mink coat, size 14-16. Shead, 255-1584.
23" CURTIS MATHIS TV, 4 yrs. old, walnut cabinet; 21" Curtis Mathis color TV. Martin, 298-6644.
POODLE PUPPIES, white, born Mar. 20, 1 male, females, \$35 ea.; furnace, Janitrol, horizontal, 150,000 BTU input, rebuilt w/new heat exchanger. Kidd, 256-1020 after 5.
2-SPEED EXERCYCLE. Keyser, 256-1285.

- PLASTIC, one piece 1/2"x48"x60", LD, \$30. Buchanan, 242-5066.
CAR COOLER, evaporative window mount; 16' boat, motor, trailer. Wheeler, 256-6230.
SOFA, brown tweed, foam rubber, 90", modern style, \$30; white lace teen formal, 5JP size, worn twice, \$18. Duvall, 299-8744.
30"x60" steel office table, linoleum top, center drawer, \$9. Vogel, 256-0975.
BABE-TENDA, stroller and car seat, potty chair; 18" rotary mower. Tuffs, 255-9663.
BESELER enlarger 23C-11 w/colorhead, f4.5 90mm enlarging Raptor, 2 1/4x2 1/4 negative holder, \$120. Converse, 247-4568.
PHOTOENLARGER f7.9 3.5" by Federal, and developing kit. Stephenson, 298-5902.
DELTA tilting arbor table saw w/4" jointer and 1hp motor, \$150; mall portable electric planer, \$75. Kavet, 299-1793.
UTILITY TRAILER, 5'x7', 2-wheel, oak frame, camper, rack and tarp, \$50. Reub, 299-4805.
CAMERA, Contax IIIA, f/2.0 Zeiss (Jena) Lense, w/meter, case, \$90 or make offer. Karnes, 299-9035.

WANTED

- PORTABLE BELT SANDER. Roberts, 255-9527.
VIBRATOR BELT MACHINE, prefer double pedestal, 4" belt type. Oglesby, 344-6331.
TO RENT, self-contained trailer, about 9 ft., for 1st three weeks in July. Hallisey, 298-0626.
ICE SKATES, boy's figure skates, sizes 4 1/2 and 7. Champion, 299-5821.
USED aircraft-type altimeter for use in automobile. Stevens, 299-6086.
5 TO 10 HP outboard motor; lenses for exacta Rolleiflex; fly tying gear; 8" trailer wheel, contained hub. Butler, 299-5626.
TO RENT mountain cabin, all or part of summer, Jemez area or closer, for family of four. Leroy, 255-3784.
OLDER sports car in need of engine overhaul. Claassen, 255-4347.

FOR RENT

- AVAILABLE May 1, 6205 Zimmerman NE, 3-bdr., 1 3/4 baths, den, utility rm., AC, \$125. Massey, 298-1468.
FURNISHED 3-bdr. house, good location, near bases, shopping, schools, bus; no pets \$140. Campbell, 256-1015 after 5:30.

LOST AND FOUND

- LOST—Chrysler key, turquoise and silver earring. LOST AND FOUND, tel. 264-2757, Bldg. 610.
FOUND—Gold leaf earring, SC 15-yr. tie clasp, cigarette case w/pkn. Marlboros, 1 envelope 5 ea. 18V Zener diode U718, 1 envelope 35 ea. Amplifier insulation mylar. LOST AND FOUND, tel. 264-2757, Bldg. 610.



NEW PATIO AREA surrounding the Coronado Club twin pools is enjoyed by Margaret Hayes (9314/9319). The patio space has been increased about three times by moving the west fence back. New

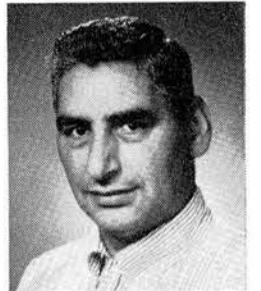
landscaping, grass, and gas lamps have been added. Additional furniture will be installed by May 27, opening day of the swim season. A gala celebration is planned starting at 10 a.m.

Supervisory Appointment

JOSEPH A. MALDONADO to supervisor of Mockup and Building Material Service Section 4614-3, Explosives and Material Handling Division, effective April 16.

Joe has been assigned as a packer in Packaging-Shipping and Commercial Inspection Division 4624 since he came to Sandia Laboratory 16 years ago.

Previously he attended school and was a coal miner for 10 years at Dawson, N. M.



Division 2563 Conducts Value Engineering Sessions For AEC Contractors

Two Value Engineering Workshops have been conducted in recent weeks for AEC contractor agencies by Value Engineering and Cost Improvement Division 2563 personnel.

As in all VE workshops, various projects were submitted to value engineering techniques in an effort to reduce costs without lowering quality, function or safety. A possible \$401,708 in cost improvements may be realized from the recommendations of the workshop teams when their ideas are implemented.

At Idaho Falls, Ida., March 6-10, the 42 participants from AEC, Ebasco Services, Inc., Idaho Nuclear, Inc., and Phillips Petroleum Co., originated cost improvement suggestions amounting to \$226,469.

Elmer Devor, Division 2563 supervisor, and A. D. Smailer conducted the workshop. In addition, about 100 AEC and contractor management personnel attended a value engineering orientation session.

The workshop conducted at Rocky Flats, Colo., April 3-7, realized \$175,239 in cost improvement suggestions. The session was attended by 24 Dow Chemical Company engineers and first line supervisors. In addition, 50 AEC and Dow management personnel attended a VE orientation session.

Mr. Devor and J. R. Cejka conducted the workshop and orientation.

Coronado Club Activities

Larger Club Patio, Pools Open May 27

The patio area around the Coronado Club twin pools is about three times larger than it was last summer. The additional area has been landscaped and attractive gas lamps have been installed. New grass is growing.

When swimming season starts Saturday, May 27, the new patio area will be furnished with outdoor furniture and provide an expanded recreation area for Club members.

A gala celebration starting at 10 a.m. is planned for opening day of the swim season. Tickets will not be required, but attendance is limited to members. Refreshments will be available at special prices and Mike Michnovicz (2555) will be on hand with accordion and song.

Plans for the patio expansion were made by the Club board of directors with Plant Engineering Department 4540 serving as consultants. Club funds purchased the landscaping, gas lights and patio furniture.

T. A. Sellers (9223) was the director responsible for the project with J. H. Kelly (3112), the director in charge of swimming programs.

Season swim tickets are now available

priced at \$5 per family or \$2.50 per individual for continuous members, and \$28 for non-continuous member families. Continuous members are those who have paid dues since Sept. 1, 1966, or for 90 days in the case of new employees.

Mr. Kelly reports that a full schedule of swimming instruction is planned along with increased activities for the Coronado Club competitive swimming and diving teams. Tickets and team activity information are available at the Club office.

Ballroom Improvements

Workmen are now about midway through the ceiling remodeling project for the ballroom. New air conditioning and lighting systems are being installed along with acoustical tile. A full schedule of activity in the ballroom will begin about May 1.

Social Hour

With the ballroom remodeling completed, social hours will resume Friday, May 5,

with Tommy Kelly on the bandstand. The chuckwagon beef and shrimp buffet will be featured at \$1.75 for adults, \$1.50 for children.

Travel

Pearson Crosby (AEC), Coronado Club travel director, reports that Club members can join organized tours to Europe or anywhere at reduced rates. For instance, space is available on a 21-day European tour in October for \$498.

The Coronado Club has made arrangements for 50 persons to attend the Olympics in Mexico City in 1968. These spaces will be available on a first-come basis and reservations are being taken now.

Mr. Crosby says that package tours can be arranged to any destination at any time for a minimum group of 15 persons.

He urges any Club member planning to travel to contact him before making arrangements. Group rates can save you money. Call the Club office (tel. 264-4561) for additional information.

Welcome . . . Newcomers

April 3-14

Albuquerque	
Susan Kissam	3126
John A. Lewin	2211
Francis L. Meador	4254
Kenneth R. Miller	3463
Carl J. Otero	3241
Faustina S. Peralta	3152
Otto H. F. Simon	2212
William E. Wanger	4254
California	
Donald B. Longcope, Mountainview	5636
Robert L. Schuch, San Diego	7113
Indiana	
David B. Davis, Bloomington	9427
Maryland	
Grayson W. Garrett, Baltimore	1431
Michigan	
Charles E. Barnes, Ann Arbor	5212
New Mexico	
Herrick S. Lauson, Santa Fe	5623
Louise C. Owen, Los Alamos	3413
Ohio	
Harold N. Post, Hillsboro	9325
Larry G. Twidwell, Centerville	5223
Oklahoma	
John B. Moore, Jr., Edmond	1324
Texas	
Jesse T. Pfrimmer, Euless	2126
Harris I. Walston, Beaumont	7226

Events Calendar

- April 21-23—"Ice Capades of 1967," Civic Auditorium. Matinees and evenings.
- April 22—Crest to top of Del Agua Canyon. N. M. Mountain Club, leader Jack Hickman, tel. 298-3804.
- April 27-30, May 4-7—"The Knack, and How to Get It," Old Town Studio, 1208 Rio Grande NW. Reservations, tel. 242-4602.
- April 28-30—Shrine Circus. Tingley Coliseum.
- April 28-May 7—"On A Clear Day You Can See Forever," Albuquerque Little Theatre, 224 San Pasquale SW. Reservations, tel. 242-4750.
- April 29—Tent Rocks area. N. M. Mountain Club, leader Norm Bullard, tel. 268-1812.
- April 29—Nizhoni Indian dances. UNM Concert Hall, 8 p.m.



NEW EYES were provided for the needy by Sandians during last week's drive. Appreciative of the concern for others are (right) R. G. Luckey (4100), a Sandia Pioneer, and B. J. Russo and A. J. Landis (both 3433) who worked on the drive.

PAGE EIGHT
APRIL 21, 1967
SANDIA LAB NEWS

Sandia's Safety Scoreboard

Sandia Laboratory:
8 DAYS
280,000 MAN HOURS
WITHOUT A
DISABLING INJURY

Livermore Laboratory:
176 DAYS
908,000 MAN HOURS
WITHOUT A
DISABLING INJURY